

TOBACCO INDUSTRY RESEARCH COMMITTEE  
350 FIFTH AVENUE NEW YORK 1, N. Y.  
*2nd Committee*

Expendable Supplies  
Application For Research Grant

325,554.00  
16,140  
341,694

Other Laboratory services and overhead Date: December 15th, 1954

This does not include salary of Principal Investigator.

1. Name of Investigator: William S. Murray, Sc.D. Committee in any phase of experimental interest of the Tobacco Industry, Research Committee in any phase of experimental research on tobacco in relation to health, which includes the use of controlled strains of animals in living or in vitro.

2. Title: Research Associate and Administrative Director

The proposed plan will not require the acquisition of additional personnel.

3. Institution: Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me. Construction quarters for the proposed project & Address: Bar Harbor, Me. with caretakers and research assistants now in training. These will be augmented by new personnel in the unskilled categories.

The facilities, equipment and services of the Laboratory plant, valued at

4. Project or Subject: The production of genetically controlled animals and tumors for use in experimental research on tobacco in relation to health by (a) the expansion of known inbred stocks and sources of tumor supply; (b) the production of such hybrids or heterozygous types as become necessary.

5. Detailed Plan of Procedure (Use reverse side if additional space is needed):

(Including relation of work to other projects and other agencies of supply)

The use of genetically controlled strains of animals has become an accepted principle in medical research. The employment of such controlled animal material in research projects to be initiated by, or supported by, the Tobacco Industry Research Committee has been approved as a policy by its Scientific Advisory Committee.

As a corollary of this policy, it is recognized that, if genetically "mixed" animals are to be used for some particular purpose, it will be much more satisfactory and much more adaptable to critical analysis if these heterogeneous mixtures are produced in a repeatable manner by the interbreeding of known stocks.

The Jackson Laboratory has the most extensive, diversified, and complete representation of inbred mice available to medical researchers. It is therefore in a unique position to undertake the extension of existing strains, the development of new strains, or the producing of desired combinations of inter-strain hybrids. This statement applies also to the many types of tumors produced and maintained by transplantation.

Mice raised at the Jackson Laboratory have the following advantages over commercially produced animals:

1. They are obtained by expansions from carefully controlled nucleus stocks;

2. They are systematically checked for purity of strain and indications of infection.

*Walter G. Allen*  
Business Officer of the Institution

State of Connecticut, industry documents, ucsd.edu/docs/1700000

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3. They are carefully graded as to sex, age, and weight;
4. The colonies are supervised by trained geneticists, who have the cumulative knowledge and experience of some 20 resident scientists, trained also in other disciplines, readily available for consultation;
5. The genetic qualities of the inbred strains; their incidences of malignancies of various types; their morphological and physiological characteristics are supported by a 30 year accumulation of data. This accumulation of information is perhaps the greatest value of these animals, in that it enables the staff to advise scientists who are about to undertake specific problems on the selection of the animal material best adapted to provide a critical assay of their research.

At the present time the Laboratory is raising a total of 1,100,000 mice per year. Of these, 700,000 are used in the problems of its own staff and for the replenishment of the breeding colonies of the 60 inbred strains maintained and for carrying on 26 transplanted tumors. The ~~max~~ remainder are observed and studied for genetic variations and are then sold to some 400 laboratories and hospitals in 43 states and the District of Columbia. Smaller numbers are shipped to laboratories in 22 foreign countries, ~~xxxx~~ covering every continent.

During the last five years, the Laboratory has been faced with an ever-increasing demand for its excess animals. Requests for almost twice the number of animals the Laboratory is now able to produce are continuously on file.

Provision of facilities and personnel for the purpose of producing additional animals is an imperative need.

It is requested that the Tobacco Industry Research Committee consider a grant in support of the effort to meet this need, on the understanding that research projects supported by the T.I.R.C. will receive first consideration in the sale of the increased number of animals which will be made available.

The grant requested will by no means cover the whole cost of scientific personnel needed to supervise and check the genetic qualities of the animals studied, or of the overhead needed to provide the facilities for their production. It will, ~~xxxxxx~~ however, justify the Laboratory in undertaking the production of a significant number of additional animals for the purposes mentioned. It will also make an important contribution to further and more complete genetic analysis of the various inbred strains, and their hybrids, and of the tumors which they produce both naturally and by induction. This will make the material studied increasingly valuable for all types of medical research.

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## 6. Budget Plan:

Salaries	\$ 20,554.00	*
Expendable Supplies	7,585.00	
Permanent Equipment	9,350.00	
Overhead		
Other (Laboratory services and overhead)	9,829.00	
	Total	
	\$47,318.00	

\*This does not include salary of Principal Investigator.

7. Anticipated Duration of Work: This is a continuing problem of parallel duration with the interest of the Tobacco Industry Research Committee in any phase of experimental research on tobacco in relation to health, which includes the use of controlled animal facilities and Staff Available.

8. Facilities and Staff Available: There will be no material to be used ~~in vivo or in vitro~~.

The proposed plan will not require the acquisition of additional professional personnel. The laboratory is at the moment construction quarters for the proposed expansion and plans to staff these new quarters with caretakers and research assistants now in training. These will be augmented by new personnel in the unskilled categories.

The facilities, equipment and services of the Laboratory plant, valued at \$1,164,000., will be available to this effort. The present mechanized cleaning and sterilizing equipment has capacity for the proposed additional loads.

None to result by (a) the acquisition of transgenic mice, (b) the production of hybrids and crosses of tumor strains, (c) the production of such hybrids or heterozygous forms as desired.

## 10. Additional Information (Including relation of work to other projects and other sources of supply):

(Including relation of work to other projects and other sources of supply):

On the basis of present performance, the strain of animals has been accepted. On the basis of past performance, this plan should make available, to research outside the Laboratory, an additional 100,000 mice per year. Tobacco Industry Research Committee has been designated as a policy by its Scientific Advisory Committee.

As a consequence of this policy, it is anticipated that, if genetically "fixed" hybrids are to be used for new projects, these hybrids will be both immunologically and genetically susceptible to infection. Any type of tumor heterogeneous mixtures are produced in a repeatable manner by any immunotherapy of tumor strains.

The Jackson Laboratory has the most advanced, differentiated, and complete representation of tumor mice available in medical research life. It is therefore in a unique position to undertake the extension of existing strains, the development of new strains, or the producing of distinct combinations of inter-strain hybrids. This statement applies also to the many types of tumors produced and maintained by transplantation.

See below of the Jackson Laboratory signature. Director of Project Murray

1. Hybrid obtained by expansion from carefully controlled nucleus

2. Any new strain must be derived from a carefully controlled nucleus

3. Any new strain must be derived from a carefully controlled nucleus

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Source: https://www.industrydocuments.ucsf.edu/docs/yjvn0000

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